

Applicant: Hans-Christoph MAGEL
Docket No. R.306018
Preliminary Amdt.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-11. **(Canceled)**

12. **(New)** A fuel injector comprising

a pressure booster which is supplied with fuel at high pressure from a pressure source and having a work chamber separated from a differential pressure chamber via a booster piston,

a switching valve which communicates with the differential pressure chamber via a control line, the switching valves being operable to effect the pressure relief and subjection to pressure of the differential pressure chamber and

a pressure chamber on the injection valve member in communication, via a pressure chamber supply line, with a compression chamber of the pressure booster,

the switching valve being a direct-switching 3/2-way valve whose valve needle is pressure-compensated and having both a sliding seat and a slide seal.

13. **(New)** The fuel injector according to claim 12, wherein the switching valve comprises a first pressure chamber and a second pressure chamber, which can be separated from one another by the slide seal.

Applicant: Hans-Christoph MAGEL
Docket No. R.306018
Preliminary Amdt.

14. **(New)** The fuel injector according to claim 12, wherein the second pressure chamber of the switching valve can be separated from a low-pressure chamber by means of the sliding seat.

15. **(New)** The fuel injector according to claim 12, wherein the valve needle of the switching valve is embodied in one piece.

16. **(New)** The fuel injector according to claim 12, wherein the valve needle has a guide diameter in the valve housing that is substantially equivalent to a diameter of the sliding seat of the valve needle.

17. **(New)** The fuel injector according to claim 12, wherein the valve needle comprises a valve needle extension which is surrounded by a low-pressure chamber.

18. **(New)** The fuel injector according to claim 13, further comprising an overflow line communicating with the high-pressure source via a high-pressure supply line discharging into the first pressure chamber of the switching valve, and the control line that subjects the differential pressure chamber of the pressure booster to pressure or pressure-relieves discharges into the second pressure chamber of the switching valve, and the pressure chambers can be separated from one another or made to communicate with one another via the slide seal in accordance with the reciprocating motion of the valve needle.

Applicant: Hans-Christoph MAGEL
Docket No. R.306018
Preliminary Amdt.

19. **(New)** The fuel injector according to claim 12, wherein the sliding seat is embodied as a cone seat or a flat seat on the end of the valve needle toward the low-pressure chamber.
20. **(New)** The fuel injector according to claim 15, wherein the valve needle embodied in one piece is received in a valve housing embodied in one piece.
21. **(New)** The fuel injector according to claim 15, wherein the valve needle embodied in one piece is received in a valve housing embodied in more than one piece.
22. **(New)** The fuel injector according to claim 16, wherein the guide diameter of the valve needle is equivalent to the diameter of the slide seal.